



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

CANHAM

Atty. Ref.: 124-822; Confirmation No. 2227

Appl. No. 09/743,447

TC/A.U. 1744

Filed: January 10, 2001

Examiner: Beisner

For: TRANSFERRING MATERIALS INTO CELLS USING POROUS SILICON

* * * * *

February 26, 2004

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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MAR 03 2004

Sir:

RESPONSE AFTER FINAL REJECTION

This responds to the Official Action dated November 18, 2003. Petition is hereby made for a one month extension of time to and including March 18, 2004, for which our check in the appropriate amount is attached.

Claims 1-27, 29-32 and 34 are pending in the application. Of these all but claim 16 has been rejected based upon prior art.

In previous submissions applicants provided evidence demonstrating conception of the invention prior to June 10, 1998. In the Official Action, page 6, the examiner reminds that applicants are also obliged to demonstrate the invention was "reduced to practice" prior to June 10, 1998. Applicants now establish constructive reduction to practice when the application was actually filed in the UK Patent Office on July 22, 1998. The attached evidence establishes due diligence from a date prior to June 10, 1998, the date of Prausnitz et al through the filing of the priority UK application on July 22, 1998.

As proof of due diligence two declarations are attached, one made by Professor Canham who is the sole inventor for the present case, and one made by John Lawrence who was the patent attorney responsible for drafting the priority application.

The John Lawrence declaration shows that the attorney sent a draft application to Professor Canham for him to review during the relevant interval. Three attempts were made by or on behalf of Mr. Lawrence to contact the inventor (one by post, and two by telephone). The final attempt resulted in a discussion of the application between inventor Canham and attorney Lawrence and Professor Canham's authorization for filing. The application was then mailed to the UK Patent Office within the three working days following the day of approval (July 16, 1998 was a Thursday).

The Leigh Canham declaration shows that he gave careful consideration to the draft patent application, that he balanced his work on the draft with other research related work, and this research activity helped in the review of the draft patent application. Finally, he considers that every effort was made to file the application in a timely manner.

These two declarations establish due diligence from June 9 to July 22, 1998.

Based upon this additional information and evidence, withdrawal of the rejection based upon the Prausnitz reference is requested.

Applicant specifically reserves his right to further address the prior art-based rejections stated in the Official Action with regard to the combination of prior art documents cited and relied upon by the examiner. However at this juncture, it is submitted that applicants have demonstrated a constructive reduction to practice and shown due diligence from June 9 to July 22, 1998, the actual filing date of the UK priority application.

Claim 16 has not been rejected in the current Official Action and thus is in condition for allowance. In fact, all claims are believed to be in condition for allowance now that applicants have fully antedated the effective art of the applied primary reference.

CANHAM

Appl. No. 09/743,447

February 26, 2004

Reconsideration and favorable action are solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____



Arthur R. Crawford

Reg. No. 25,327

ARC:eaw

1100 North Glebe Road, 8th Floor

Arlington, VA 22201-4714

Telephone: (703) 816-4000

Facsimile: (703) 816-4100



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

CANHAM

Atty. Ref.: 124-822

Appl. No. 09/743,447

Group: 1744

Filed: January 10, 2001

Examiner: Beisner

For: Transferring materials into cells using porous silicon

* * * * *

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RECEIVED

MAR 03 2004

Sir:

SUPPLEMENTAL DECLARATION UNDER RULE 131

I, Leigh Trevor Canham, a British subject, hereby declare as follows:

1. That I am the sole inventor of the above-identified application and I reside in Malvern, Great Britain.

2. During the interval 9 June to 22 July 1998 I was in possession of a draft specification corresponding to the priority GB application for US Patent Application Serial Number 09/743,447. I reviewed and gave the draft specification careful consideration during this interval. At the time in question, I discussed the draft application with an assistant of the patent attorney dealing with the case, and finally authorized the filing of the application.

4. I have studied my records for the period between 9 June and 22 July, and I was engaged in a variety of research related activities, which included:

(a) working on a research proposal to investigate the transfer of materials into cells at a subcutaneous site using resorbable silicon;

(b) performing a literature study concerning haemocompatibility and discussing the study with a collaborator, the literature study and discussion being with the intention of performing research on the haemocompatibility of resorbable silicon;

(c) attending at least one meeting to discuss the bid proposal for research involving the transfer of drugs into cells, emphasis being placed on vascular sites; and

(d) attending a one week conference relating to silicon and other relevant technologies.

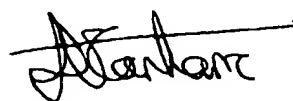
5. These research related activities provided information, including technical information in the field of the invention, which helped in the review and assessment of the draft.

6. During this interval a balance had to be made between ensuring that the technology, which was at a very early stage of development, continued to progress towards commercialization through additional research, and doing all that was possible to help the responsible attorney to finalize the specification. I believe that, given the commercial and research pressures, every reasonable effort was made between 9 June and 22 July, to file the specification in a timely manner.

7. That I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:

19th February 2004



Leigh Trevor Canham



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

CANHAM

Atty. Ref.: 124-822

Appl. No. 09/743,447

Group: 1744

Filed: January 10, 2001

Examiner: Beisner

For: Transferring materials into cells using porous silicon

* * * * *

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RECEIVED

MAR 03 2004

Sir:

SUPPLEMENTAL DECLARATION UNDER RULE 131

I, John Lawrence, a British subject, hereby declare as follows:

1. That I am a Partner at the UK Firm of Patent Attorneys, Barker Brettell of 138 Hagley Road, Edgbaston, Birmingham B16 9PW, United Kingdom.

2. I was responsible for drafting the patent application "Transferring materials into cells using porous silicon", having GB Patent Application Number GB 9815819.9.

2. A draft patent application was sent to Professor Leigh Canham prior to 9 July 1998, for him to review during the interval 9 June to 16 July 1998.

3. A letter was sent to Professor Canham on 9 July 1998 to ask for comments with respect to this draft patent application.

4. From the records contained in the file for this case, I believe that my assistant at the time, Toby Gosnall, telephoned Professor Canham's employer in an

attempt to talk with Professor Canham on 15 July 1998. Toby Gosnall was unable to speak with professor Canham on that date.

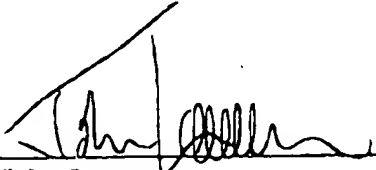
5. Toby Gosnall telephoned Professor Canham again on 16 July 1998, they discussed the specification, and Professor Canham provided authorization for it to be filed.

6. The Patent Application was posted to the GB Patent Office on 21 July 1998, and received a filing date of 22 July 1998.

That I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:

20th February 2004


John Lawrence

EB



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MAR 03 2004

Mr. L. Canham,
DERA,
E Building, DRA Malvern,
St. Andrews Road,
Malvern,
Worcestershire, WR14 3PS.

Your ref.

Our ref.

DERA/HO/COMP/IPD65/IR025 - P2703 JL/J1446

09 July 1998

Dear Leigh,

Draft Proposed Patent Application - DNA Transfer Using Silicon

This case has come up in my diary system for a review and I see that you have had the second draft of the patent application since 14 May 1998. I wonder whether you are yet in a position to provide your comments, or confirm that the application is in order for filing?

I would stress that the invention should be kept secret until the application has actually been filed.

I look forward to hearing from you in the near future.

Yours sincerely,

John Lawrence

AJJ

cc: Mr. J. B. Edwards - DERA Malvern

178 EAGLEY ROAD, EDUBASTON, BIRMINGHAM B16 9PW, ENGLAND. TEL: +44 (0)121 456 1364 FACSIMILE: +44 (0)121 456 1368
TELEX: 557598 PATENT G. E-mail: osam@barkerbrettell.co.uk URL: <http://www.barkerbrettell.co.uk>

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Incorporating Audrey Knowles & Co.

Mr. L. Canham,
DERA - E Building,
DRA Malvern,
St. Andrews Road,
Malvern,
Worcestershire, WR14 3PS.

RECEIVED

MAR 03 2004

Your ref.

P2703

Our ref.

JL/TG/J1446

22 July 1998

Dear Leigh,

New Patent Application - DNA Transfer Using Silicon

Further to your recent approval of the text of this specification, I can confirm that the application was sent for filing at the Patent Office on 21st July 1998 and will therefore receive a filing date of 22nd July 1998.

You are therefore free to disclose the contents of your application from now on without prejudicing your rights. If you have any improvements to your new idea then you should consider whether or not further applications should be filed.

Our Records Department will forward a presentation copy (in triplicate) of the application to Mr. Brian Edwards as soon as the filing details are received from the Patent Office. In the meantime, I enclose herewith a copy of the specification as filed for your reference.

Yours sincerely,

John Lawrence

AJJ

cc: Mr. J.B. Edwards - DERA Malvern

138 HAGLEY ROAD, EDGBASTON, BIRMINGHAM B16 9PW, ENGLAND. TEL: +44 (0)121 456 1364. FACSIMILE: +44 (0)121 456 1368.
TELEFAX: 337898. PATENT G. E-mail: bham@barkerbrettell.co.uk URL: <http://www.barkerbrettell.co.uk>

London: 0121 452 2236. Southampton: 01703 326970. Cambridge: 01223 411155. Belford: 01957 501557. Worcester: 01905 27389. Gloucester: 01452 317799.
Christopher J. Smith, F.A., E.P.A., S. William Stonehouse, C.P.A., E.P.A., Geoffrey M. Lomas, B.Sc., C.P.A., F.P.A., Richard M. H. Callaghan, M.I.T.M.A., Patricia M. Makowski, B.A., C.P.A., F.P.A.,
John Lawrence, M.A. (Scribbles), C.P.A., E.P.A., M.I.T.M.A., (Scribbles), L.A.S.A., M.I.T.M.A.,
John D. Antler, B.Sc., C.P.A., F.P.A. (Associate), David A. Wightman, M.A. (Chem), C.P.A., E.P.A., M.I.T.M.A., John Kinade, B.Sc., C.P.A., F.P.A., M.I.T.M.A.,
Richard M. H. Callaghan, C.Chem., M.A.S., C.P.A., E.P.A., M.I.T.M.A., Audrey E. Knowles, C.P.A., F.P.A., M.I.T.M.A., Paul S. Russell, M.Sc., C.P.A., E.P.A.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**RESPONSE UNDER RULE 116
EXPEDITED HANDLING PROCEDURES**

In re Patent Application of

Atty Dkt. 124-822

CANHAM

C# M#

Serial No. 09/743,447

TC/A.U.

1744

Filed: January 10, 2001

Examiner: Beisner

Date: February 26, 2004

Title: TRANSFERRING MATERIALS INTO CELLS USING POROUS SILICON

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MAR 03 2004

Mail Stop AF

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

RESPONSE/AMENDMENT/LETTER

This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon.

☒ **Correspondence Address Indication Form Attached.**

Fees are attached as calculated below:

Total effective claims after amendment	32	minus highest number		
previously paid for	33	(at least 20) =	0 x \$ 18.00	\$ 0.00

Independent claims after amendment	3	minus highest number		
previously paid for	3	(at least 3) =	0 x \$ 86.00	\$ 0.00

If proper multiple dependent claims now added for first time, add \$290.00 (ignore improper)	\$ 0.00
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Petition is hereby made to extend the current due date so as to cover the filing date of this paper and attachment(s) (\$110.00/1 month; \$420.00/2 months; \$950.00/3 months)	\$ 110.00
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Terminal disclaimer enclosed, add \$ 110.00	\$ 0.00
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<input type="checkbox"/> First/second submission after Final Rejection pursuant to 37 CFR 1.129(a) (\$770.00)	\$ 0.00
<input type="checkbox"/> Please enter the previously unentered, filed	
<input type="checkbox"/> Submission attached	

Subtotal \$ 110.00

If "small entity," then enter half (1/2) of subtotal and subtract	-\$ 0.00
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☐ Applicant claims "small entity" status. ☐ Statement filed herewith

Rule 56 Information Disclosure Statement Filing Fee (\$180.00)	\$ 0.00
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Assignment Recording Fee (\$40.00)	\$ 0.00
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Other: Supplemental Declaration of Canham; Supplemental Declaration of Lawrence; July 9, 1998 letter from John Lawrence to Leigh Canham; July 22, 1998 letter from John Lawrence to Leigh Canham	0.00
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TOTAL FEE ENCLOSED \$ 110.00

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

1100 North Glebe Road, 8th Floor
Arlington, Virginia 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100
ARC:eaw

NIXON & VANDERHYE P.C.
By Atty: Arthur R. Crawford, Reg. No. 25,327

Signature: _____